## **REMARKS**

As a preliminary matter, the Examiner states under item 2, page 2 of the Office Action that the references cited in the previously filed Information Disclosure Statements do not appear to disclose the prior art structure depicted in FIG. 3 of the present application. Accordingly, the Examiner requests Applicants to provide a document that shows this structure. Applicants are unaware of a particular document that shows this figure. That is, FIG. 3 does not correspond to a particular reference, but merely describes admitted prior art.

Claims 1-2, 4-8, and 10-13 stand rejected under 35 U.S.C. 102(e) as being anticipated by Taguchi et al. (U.S. Patent No. 6,603,722 B1). In response, Applicants amended independent claims 1, 7 and 13 to further clarify that the determining of the at least one expected value according to the average value occurs so as to allow the expected value to follow a fluctuation amount of a direct current component of the reproduction signal, and respectfully traverse the rejection as it applies to the amended claims.

Taguchi is directed to a system for reproducing data with increased accuracy that reduces a difference between sampled and expected values. However, Taguchi does not disclose or suggest allowing the expected value to follow a fluctuation amount of a direct current component of the reproduction signal according to the average value calculated in a detected state, as now recited in the amended claims.

In contrast, the present invention has one or more states of the reproduction signal that are detected according to the data used for selecting the state-transition path.

Moreover, the average is calculated for each of the detected states of the reproduction signal

to require a fluctuation in the DC component of the reproduction signal. (See Applicants' Specification page 18, lns. 18-22, and page 21, ln. 11 to page 24, ln. 12). By using the average values of one or more states of the reproduction signal an offset amount can be calculated accurately, and reliable expected values are obtained. Therefore, reproduction is performed more accurately even if the amplitude of the sampled value fluctuates. For these reasons, withdrawal of the §102(e) rejection of claims 1-2, 4-8, and 10-13 is respectfully requested.

Claims 3 and 9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Taguchi. Applicants traverse the rejection for the reasons recited above with respect to the §102(e) rejection of independent claims 1 and 7.

Since claims 3 and 9 ultimately depend upon claims 1 and 7, respectively, they necessarily include all of the features of their associated independent claims plus other additional features. Thus, Applicants submit that the §103 rejection of claims 3 and 9 has also been overcome for the same reasons mentioned above to overcome the rejection of independent claims 1 and 7. Applicants respectfully request that the §103 rejection of claims 3 and 9 also be withdrawn.

New claims 14-16 are added and depend from independent claims 1, 7 and 13.

New claims 14-16 further recite that at least one state includes a peak value, a center value, and a bottom value of the reproduction signal. These claims are believed to be allowable for at least the reasons recited above. Applicants earnestly solicit allowance of new claims 14-16.

For all of the foregoing reasons, Applicants submit that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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